DEPOSITION OF ELECTRONIC CIRCUITS ON FIBERS AND OTHER MATERIALS

Abstract of the Invention

Fibers are disclosed, such as textile fibers, having electrical components deposited thereon. More particularly, one or more electrical components are formed directly onto the surface of at least one fiber. The fiber having the electrical component formed thereon may then be interlaced with other fibers for form a larger piece of fabric, which can be employed to produce an article of clothing. For example, a group of transistors and piezoelectric components forming an accelerometer may be woven onto one or more natural or synthetic fibers. The fibers may then be employed, for example as the warp, weft, or both, of a woven piece of fabric, or used to form a knitted piece of fabric. The fabric piece can then be cut and sewn to form a wearable item, such as a shirt, a pair of pants, a hat, or the upper piece of a shoe that includes the accelerometer.